

REMARKS

Claims 1-11 are pending in the present application. In the Office Action dated August 16, 2004 the Examiner rejected claims 1-11 under 35 U.S.C. 102(e) as being anticipated by Innes et al. (U.S. Patent No. 6,754,321. Applicants respectfully traverse this grounds of rejection and request reconsideration of the application in view of the following remarks.

Applicants' disclosure v. the cited art.

Applicant's disclosure will now be discussed in comparison to the prior art. Of course, the discussion of the disclosed embodiments, and the discussion of the differences between the disclosed embodiments and the prior art subject matter, do not define the scope or interpretation of any of the claims. Instead, such discussed differences merely help the Examiner appreciate important claim distinctions discussed thereafter.

Applicants disclose a combination of features for dealing with a problem encountered by a mobile work force that must interact with *a schedule having shifts of workers in which orders are assigned* to be performed. Such mobile workers typically use a mobile wireless device for remotely accessing the schedule *by an application* through the Internet or a dedicated network. The schedule containing the work orders and the application for handling and updating the schedule is remotely stored on an enterprise computer systems. The worker dynamically accesses the schedule of work orders from the enterprise computer system in real time and is therefore in continuous interaction with the schedule of work orders at various times to obtain changes in the schedule, changes in the work order, or to modify (e.g., update) the work order based on actions taken by the worker during the course of the day.

The problem encountered is that wireless data communication devices are subject being temporarily disconnected from the network as the worker travels from location to location during his work shift. When the worker is thus disconnected from the network, he is unable to dynamically interact with the schedule and may lose information that has previously been entered that is meant for uploading from the mobile wireless device to the schedule application located on the remote enterprise computer system, or on the other hand, may not obtain updated information being downloaded from the remote schedule application to the wireless device.

As a solution to this problem, the inventors disclose a proxy *that acts for the schedule when the mobile device is temporarily disconnected to the Internet*. The proxy is a sub

application located in part on the local wireless device and in part on the remote enterprise system. When the worker is temporarily disconnected from the network, and hence from the remote enterprise system, the proxy located on the local wireless device is configured with sufficient information about the schedule application to act as if the device were still in communication with the remotely stored application. The proxy thereby provides dynamic interactions with the local wireless system that appear the same as the dynamic interactions with the remote schedule application. Conversely, the remote schedule application acts as if it is still connected to the local wireless device by communicating and storing commands, updates or other work order scheduling data to a complementary portion of the proxy residing on the remote system as if proxy were the wireless device. When the local wireless device again becomes connected to the Internet or dedicated network, the two portions of the proxy automatically synchronize so that data, commands and updates flowing in each direction are executed as if the worker never lost connection. Thus, the worker appears to have a seamless interaction with the remotely located schedule, even though in fact, the worker may have been temporarily disconnected from the remote schedule from time to time.

Innes does not teach or suggest such a system or method. Innes is directed to systems and methods for automatically generating *names for devices* that need to be identified during connections to a network. The device names comprise a class name, a device class and a device identifier that uniquely identified a device within the class (e.g., Col 1, lines 40-45). The class names are used during routing of communications to identify a respective name resolution process for interpreting and resolving the particular format of device identifiers of that class.

Other than referring to devices that need to be connected to an network, which may be connected remotely, Innes teaches nothing whatsoever about *a schedule having shifts of workers in which orders are assigned* to be performed. The Examiner did not point out, and Applicants cannot find anywhere in Innes where a schedule or work orders or any equivalent thereof is mentioned. In fact, the undersigned has done a text search and cannot find the word ‘schedule’ or ‘worker’ or ‘workforce’ or ‘work order’ or even ‘order’ in any context pertinent to Applicant’s disclosure. With respect to these elements, the Examiner merely stated that Innes discloses “a schedule (enterprise server).” An enterprise server is a machine, not a schedule. A schedule, and particularly a *schedule having shifts of workers in which orders are assigned to be performed*, is a particular type of application that interacts with a database of a particular type of

information (work order and work scheduling information) that is created by subcomponents of the application, and which is designed to dynamically monitor the status of work orders during the course of the day. Thus, a schedule works in a particular context to provide particular functions – i.e., to dynamically communicate and update work related assignments to workers in a mobile workforce connected to the schedule through a remote wireless communication device. In contrast, the only functions of the enterprise server disclosed in Innes are as follows:

- A. The addressable communications apparatus may be an enterprise server providing a "postbox" service, which mobile devices can connect to when ready to retrieve mail. (col. 2, lines 26-29).
- B. The name resolution steps according to this aspect of the invention are preferably performed at an enterprise server comprising an addressable communications apparatus within the network. Lightweight, mobile communications devices which register with the enterprise server receive network communications via the enterprise server. (col 2, lines 50-55).
- C. For example, if a device type is a 'netBook' device from Psion and the manufacturer-assigned ID for a specific individual netBook is a serial number '1234567812345678', then an example universally-unique device name which identifies the device as being within the class of devices running the EPOC operating system 80 is:
epoc!netBook%1234567812345678@uk.ibm.com
where 'uk.ibm.com' is an owning enterprise server name (only required for communications sent from or destined for devices outside of the sender's enterprise network, and even then not required for all types of communication)...(col 4, lines 46-57).
- D. The 'epoc' class name is useful during routing of network communications since it determines that a message for this device should be sent to a specific name resolution process which is associated with devices running the EPOC operating system 80. This name resolution process 50 preferably runs on a data processing apparatus 60 at the network address identified by the enterprise server name. This name resolution process is adapted to resolve the unique device identifier 'netBook%1234567812345678' to identify a specific EPOC device known to the 'epoc' name resolution process. (col 4, line66-col 5, line 8)
- E. In the preferred embodiment, generated device names are registered 220 with an enterprise server 60 within the network 100. This can involve a systems administrator of an organisation which owns the device notifying the organisation's enterprise server of the device names of all devices owned or approved by the enterprise. A communications manager process

at the server thereafter routes to a respective server-based input queue all communications which are destined for that device.

Alternatively, the step of sending 220 a request to the enterprise server to register a device name can be implemented as one of the functions performed by the name generation software component 70 running on a device. In this latter case, the sending of a registration request or notification could be performed whenever the name is generated. If the name is regenerated during a single user session, the registration requests may be limited to one per user session to avoid unnecessary transmissions.

The enterprise server operates a postbox service for mobile devices owned or managed by the particular enterprise. Communications from remote data processing systems or communications devices which are targeted for a particular pervasive device are sent to the relevant enterprise server and are added to a respective queue 90 in the storage of the enterprise server 60. For mobile devices which may connect to the network at different locations, and for other devices which connect to the network via wireless connections such that permanent connection-availability cannot be assumed, the communications are held at the enterprise server 60 until requested by the mobile device. (col 5, line 62-col 6, line 25).

None of these places in the text can be fairly be said to teach anything about the enterprise server being configured *with a schedule that a schedule having shifts of workers in which orders are assigned to be performed*. More particularly, item A refers to post box function for receiving mail (presumably email). Item B refers to the acts of performing name resolution steps- which is the central technical function that is the focus of Innes as a whole. Items C refers to device identifiers. Item D again refers to aspects of the name resolution process. Item E refers to the process of registering devices with the enterprise. There is no other portion of the text that makes any more meaningful reference to the enterprise server. The text cited by the Examiner at column 6, lines 14-25 is included above. That text expressly discloses the post box service, *i.e.*, the storing of messages until the device connects to the enterprise server. Thus, nothing in the text of Innes can fairly be equated with *a schedule having shifts of workers in which orders are assigned to be performed*.

Innes also cannot fairly be said to disclose *a proxy that acts for the schedule when the mobile device is temporarily disconnected to the Internet*. For this, the Examiner cited col. 6, lines 38-44, which reads as follows:

When the mobile device disconnects from the network-connected computer 110, the network-connected computer ceases to act as a

requesting proxy and so no further communications intended for the mobile device are sent to the network-connected computer. Instead, communications will be queued at the enterprise server 60 until the mobile device 10 once again connects to the network 100. (emphasis added).

This text, in-fact, discloses a concept that is almost opposite to what Applicants disclose. The underlined text teaches that the network connected computer ceases to act as a requesting proxy when the mobile device disconnects from the network connected computer. In contrast, Applicants disclosure teaches that when the mobile device disconnects from the network computer, the proxy acts as the schedule. That is, the function of the proxy kicks-in when the device is disconnected, so that further communications intended for the schedule (which resides on a remote network connected computer) are continually made to the proxy as if the mobile device were still connected to the schedule through the network.

In addition, the function of the proxy of Applicant's disclosure is to act for the schedule. In contrast, in the text cited by the Examiner at col. 6, lines 25-37, the function of the proxy of Innes is expressly stated to act as a gateway for remotely accessing the enterprise server and to allocate and IP address for the mobile device. This is not the same function as acting as a schedule. Moreover, it should be pointed out that the only place the proxy exists in the system described by Innes is on the network computer. Hence, even if Innes did disclose a schedule, which it does not, with the system described by Innes, it would impossible for the proxy to act as the schedule when the mobile device is disconnected from the network because the proxy of Innes resides on the network not on the mobile device.

The claimed invention versus the cited art.

Turning now to the claims, independent claim 1 recites, in pertinent part, a *schedule having shifts of workers in which orders are assigned to be performed;... and a proxy that acts for the schedule when the mobile device is temporarily disconnected to the Internet*. As discussed above, Innes fails to disclose the elements emphasized in italics because Innes altogether fails disclose anything remotely resembling a schedule of work orders, and also fails to disclose a proxy with the recited function of acting as the schedule when the device is disconnected from the Internet. Therefore claim 1 and claims 2-5 that depend from claim 1 are not anticipate by Innes so the rejection of the claims on this ground should be withdrawn.

Independent claims 6 and 11 recite in pertinent part *scheduling an order to be performed by a worker into a schedule; accessing the schedule* by a mobile device via a server

on the Internet; and *substituting the schedule by a proxy to allow an application on the mobile device to interact with the proxy when the mobile device is temporarily disconnected from the schedule*. Again, none of the italics elements are disclosed by Innes because Innes fails to disclose a schedule and fails to disclose a proxy that allows the application on the mobile device to interact with the proxy when device is disconnected from the schedule. Therefore claims 6-11 are not anticipated by Innes so the rejection of the claims on this ground should be withdrawn.

Innes is not valid prior art.

The foregoing arguments have been made for the record to establish that Innes would not anticipate the present invention if Innes were valid prior art. Applicants further submit however, that Innes is not valid prior art under § 102(e). Innes is prior art under § 102(e) as of its U.S. filing date of July 6, 2000. The present application claims priority to U.S. provisional application No. 60/193,917, filed on March 31, 2000, which is before the filing date of Innes. A copy of the provisional application is submitted herewith for the Examiner's convenience. The Examiner will note that the provisional application discloses the essential concepts claimed in the present non-provisional application. Accordingly, the present application is entitled to rely on the priority date of the provisional application with respect to prior art. Therefore, Innes is not valid prior art so the rejection of the claims should be withdrawn on this ground, even if the Examiner does not agree with the distinctions of the claimed invention over Innes as discussed above.

All of the claims remaining in the application are now clearly allowable.
Favorable consideration and a timely Notice of Allowance are earnestly solicited.

Respectfully submitted,

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